

Ash Street Force Main and Pump Station Response to Public Comments

Note: Comments and responses are broken down into six topics. The topics are: project route, community impact, environmental impact, odor, project benefits and maintenance.

TOPIC: Project Route

Comment:

- Why is the pump station close to the Silver Grove Park and within the city limits of Silver Grove?

Response:

The existing Ash Street Pump Station property at the corner of 1st Street and Ash Street was originally dedicated for public use on November 23, 1936 by the Silver Grove Land and Building Company for the purpose of constructing a sanitary sewage pump station. The sewers that convey wastewater from the surrounding area all converge at that location. To move from that location would require additional conveyance modifications and property acquisition. Additional sites were reviewed and cost estimates were developed, but the selected site proved to be the most practical and economical.

Comment:

- Why doesn't SD1 run the pipes in backyards instead of in Four Mile Road?*
- Why doesn't SD1 run the pipes in the road and stay off of residents' properties?*

Response:

One of the primary objectives in designing the force main route was to install the pipeline in the public right-of-way whenever possible to completely avoid impact to private property. However, constructability issues often dictated that the pipe be installed closer to Four Mile Road or in residents' yards. Where the force main route runs through residents' yards SD1 will try to minimize the impact to the residents and the community by locating the force main on an area of the property that is in the floodplain and is considered not buildable.

SD1 recognizes the inconvenience created by the installation of a force main on private property. In certain areas of the project, however, this is unavoidable. The Kentucky Transportation Cabinet (KYTC) has the authority to decide whether or not a pipeline can be constructed beneath state owned roadways or routes . Before KYTC will grant

permission to construct a pipeline beneath the road, they require the utility to evaluate the constructability of other routes that do not require pipe to be installed beneath the road. If it is determined there are no other options except to construct the pipe beneath the roadway, KYTC has strict rules about road closures and how construction would impact traffic and community safety. For this project, KYTC ruled out any routes that would necessitate the closure of Four Mile Road (KY 547) for any amount of time, and due to power poles and buried utilities, there is not sufficient space within the right-of-way to construct much of the pipeline in the road without closing the road. Also, the terrain in the area presented some hydraulic obstacles for the design of the pumps at the Ash Street Pump Station.

Comments:

- *Why has SD1 picked the Four Mile Road route as opposed to other routes?*
- *Why didn't SD1 pick a route that did not go through Camp Springs?*
- *Was it only selected to save money?*
- *Were the long term benefits to the community or to Campbell County considered when establishing a route for the pipeline?*

Response:

SD1 has thoroughly evaluated alternate routes in an attempt to avoid the Four Mile Road route. While this route is the most cost effective, one of the other primary reasons for selecting this route was because it is the most feasible to construct. The force main, pump station and new gravity sewer system are all essential to reducing the current public health threat posed by the overflows of sewage in the communities of Highland Heights and Silver Grove. While the selected alignment does go through Camp Springs, it provides a long term solution to mitigating the public health concerns around human contact with raw sewage from these overflows in these Campbell County communities. SD1 is required by federal law to reduce or eliminate these sewer overflows, and SD1 wants to do so using fiscally-responsible solutions that are affordable to our ratepayers across our three-county service area. SD1 has listened to the concerns the community expressed about this project and has developed a design that accommodates the needs and addresses the concerns of both individual property owners and the impacted community as a whole.

Comments:

- *What are the costs of each route?*

Response:

Alternate routes and costs associated with alternate routes have been continually studied by SD1 and are still being evaluated. The results of these analyses have been presented publicly on many occasions, including at several SD1 Board Meetings and at the Public Meeting that was held by the Kentucky Division of Water at the Alexandria Court House on Oct. 15, 2013. The cost of each route varies depending upon the constructability of the route, the additional pumping required due to the topography of the land and the overall length of the pipe. The number and cost of easements needed to construct the pipeline along each of the routes also vary depending upon the required length of the pipe for a particular route and whether the pipe will be installed in the road or on private property. Analysis of each route continues to demonstrate that a route along the Four Mile corridor is the most cost effective and most feasible to construct. The costs of the alternate routes that were presented at the Oct. 15, 2013 Public Meeting are as follows:

Route 1	\$8.2 million
Route 1A	\$16.0 million
Route 1B	\$10.5 million
Route 1C	\$15.7 million
Route 2	\$19 million
Route 2A	\$19.2 million
Route 3	\$19.9 million
Route 3A	\$19.7 million

Please see attached Exhibit "A" showing route alignments and associated costs.

Comment:

- Have the cost comparisons of the routes been verified by KDOW?

Response:

The cost information is included in the Environmental Information Document (EID) submitted by SD1. KDOW is reviewing the EID as part of the loan approval process.

Comments:

- When was the Riley Road Pump Station site selected?

- Was the route from Silver Grove to Riley Road investigated prior to selecting the Riley Road site?

- *Why weren't the residents notified prior to the construction of Riley Road that this Riley Road location would require a pipeline to be constructed through Camp Springs along Four Mile Road?*
- *Was the Four Mile Road route a "done deal" prior to any public notifications received by Camp Springs residents?*

Response:

The Riley Road Pump Station was constructed as part of SD1's Eastern Regional Collection System Improvements in 2007. This new Riley Road Pump Station replaced an existing pump station on the site when SD1 took over ownership of the sanitary sewer system from the City of Alexandria in 1999. A gravity sewer system that connected to the original pump station was also already in existence, so a relocation of this pump station was not feasible.

To alleviate public health concerns associated with the overflows of sewage occurring in the Silver Grove area, the new Riley Road Pump Station was designed to handle additional wastewater flow from the Silver Grove area. When the new Riley Road Pump Station was built, alignments from the proposed Ash Street Pump Station to the Riley Road Pump Station were still being considered. In the fall of 2009, an alignment along Four Mile Creek Road was determined to be the most logical and economical alignment because it followed the natural topography along Four Mile Creek and eliminated constructing a pipe through multiple peaks and valleys, which would have necessitated additional pumping.

This process occurred over a several year period during which there were meetings held with the residents of Camp Springs and Silver Grove. Until the most cost effective alignment had been determined and regulatory reviews and approvals complete, the project could not move forward. As of this date the final approval is still pending.

Comments:

- *Are there other options to handle the sewage from Silver Grove besides running a pipeline from Silver Grove to the Riley Road Pump Station?*
- *Has the route along Route 8 to Twelve Mile Creek been looked at seriously?*

Response:

As part of the overall plan to eliminate sewer overflows in the creeks and rivers of Northern Kentucky, many options were considered. The flow from the Silver Grove area is currently conveyed by the Ohio River Interceptor to the Dry Creek Wastewater Treatment Plant (WWTP), which is approximately 18 miles away. Options to increase capacity to handle wet weather flows from the Silver Grove Pump Station merely moved the capacity problem downstream and added additional flow to an already overloaded

Ohio River Interceptor. The option of running a pipeline from Silver Grove to the Riley Road Pump Station was chosen because it was determined to be a cost effective solution and further the Eastern Regional Water Reclamation Facility has the capacity to treat the additional flow. The route along Route 8 to Twelve-Mile Creek was studied but the Four-Mile Creek corridor was determined to be a more cost-effective and constructible route.

TOPIC: Community Impact

Comment:

- *How has SD1 accounted for the impact to the residents, the agriculture and historic nature of the route and the general impact to businesses and traffic along Four Mile Road?*
- *SD1 received many comments expressing concern about preserving Camp Springs.*

Response:

Throughout the design process for this project, considerable care has been taken to minimize the impact to the Camp Springs and Silver Grove communities. SD1 has attempted to contact residents whose property will be disturbed by construction to discuss and mitigate individual property owners' concerns. Initial contact with property owners was made by engineering and surveying firms under contract with SD1 to work on this project. Since these initial contacts, discussions have been attempted with property owners by both the consultants and SD1 staff. At this time, SD1 has secured approximately 50 percent of the easements required to construct the project, and SD1 will continue to work with the remaining property owners to address their property concerns and ultimately secure the required easements.

Techniques such as "directional drilling or jack-and-bore," in which SD1 drills a hole through the ground and inserts the pipe in that hole, will be used in all areas where the pipe will be crossing Four Mile Creek. By utilizing this technique the disturbance to private property, the creek and its ecosystem will be minimized. The route avoids most of the community's large trees, but where large trees are impacted, SD1 will take efforts to replant. SD1 was required to perform many types of cultural and environmental surveys within the project area to ensure the project avoided irrevocable and harmful impacts to historical structures, endangered species, natural wetlands, and the forested character of the area. Additionally, SD1 will be installing air release valves at certain high points along the force main with odor-adsorbing carbon filters to minimize any potential odors. The force main design also incorporates the use of restrained joint pipe and/or fused joints to minimize the potential for leakage, especially in sensitive areas such as agricultural areas and where the pipe crosses the creek. Finally, large portions

of the force main route lie in the floodplain of Four Mile Creek, which minimizes impact to the community by avoiding pipeline construction on otherwise buildable property.

The alignment of the pipe through agricultural working farms is of concern to SD1, and as a result, SD1 will continue to work with the owners of these farms to discuss various construction techniques that may be employed to reduce or eliminate surface disturbance. SD1 will also discuss with the farm owners any seasonally driven economic impacts that exist and will attempt to reserve construction in these areas only for times of the year where economic impact can be largely minimized or even eliminated.

The type of pipe employed for this project will be of a very high quality, and every effort will be made to significantly reduce the potential for long-term maintenance access needs.

Comments:

- *Will there be a decreased real estate value because of the new pipe?*
- *Can residents along the sewer pipe alignment tap into the pipe and receive sewer service?*
- *How will the property owners be able to use the easement land?*
- *Will there be a loss of new construction on properties that have an easement?*

Response:

In general, properties that have access to sanitary sewer service actually have higher property values than those without access to this type of service. The force main can be designed with connection points that will allow residents to connect to the force main and receive sanitary sewer service. However, because the pipeline is a force main, the connection is not as simple as “tapping into the pipe.” It would be best if these connections could be designed and implemented as part of the initial construction, since the connection design has an impact on the pump design at the Ash Street Pump Station. If residents are interested in receiving sanitary sewer service, they can contact the SD1 project manager at (859) 578-7336 to discuss options. SD1 would like to get this information as soon as possible.

Easements that are conveyed by the affected property owners allow for the installation of the new pipeline. Property owners have the right to use the easement land for purposes that do not directly impact the pipeline or its intended use. Buildings and other structures are examples of items that would impact SD1’s continued access to the new pipeline. Agricultural use of easement property will be permitted.

Comments:

- *How will SD1 address the possibility of damage to historic structures?*

Response:

A full Cultural Resources Evaluation has been completed along the project route and a conditional approval letter has been received from The State Historic Preservation Office allowing the project to proceed. Any structure that was identified as having historical significance has been noted and taken into consideration during the design of the project. The contractor that will be constructing the project will be required to take precautions to preserve these historic structures and prevent any damage to the structure. Prior to construction, and subject to agreed access by individual property owners, a pre-construction survey will be conducted to document the existing condition of the structure. During construction, there will be vibration monitoring done by a specialized contractor who will then read and report the results of the monitoring to SD1 to confirm that no harmful vibrations were recorded. In the event that construction causes damage, the contractor will be required to restore the structure to pre-construction condition. All construction on this project will be bonded and insured.

Comments:

- *Why did SD1 not know that Camp Springs is an historic area prior to picking the Four Mile Road route?*
- *Why weren't the cultural and historical reviews done correctly until the Camp Springs Initiative pointed out deficiencies in the study?*

Response: SD1 properly conducted Cultural Resource, Endangered Species, Wetlands and Environmental evaluations for the pump station site as well as the pipeline routes. The purpose of these evaluations was to determine any environmental, cultural or historic significance that should be accounted for during the execution of the project. SD1 believes that it was aware of the historical significance of the Camp Springs area at the appropriate time in order to accomplish a thorough review of the potential alignments and design of the selected alternative alignment. These evaluations were conducted with the utmost competence and professionalism as required by the permitting authorities. The limits of the study were expanded after a meeting with Camp Springs residents, SD1, GRW, Third Rock Inc. and the Army Corp of Engineers (ACOE), even though work previously done related to the project was correct and proper.

Comments:

- *How will SD1 restore the leach lines for my property that will be crossed during construction?*
- *How will SD1 in general restore the properties that are crossed?*

Response:

Any septic system lateral lines disturbed during construction will be repaired to working condition. The construction contractor will replace any damaged portions of the leachate system that are caused by the construction of the project with new piping and will backfill with soil, meeting the requirements of the Kentucky Health Department. The construction contractor will also be required to restore all disturbed property along the force main route, including roads used for access, to a condition that is as close to pre-construction conditions as possible. Pictures and video will be taken to capture and document the condition of the property prior to construction. The type and extent of restoration will be based on contractual requirements that will be consistent for all properties affected by the construction.

Comment:

- If a property owner will not grant an easement, will SD1 "take" the property?

Response:

SD1 does have a responsibility as a public utility to protect the health and safety of the community and the environment by performing certain improvements to the sewer system. SD1 will negotiate in good faith and will work with all property owners to try to come to mutually agreeable terms in acquiring the property and rights-of-way necessary to construct the project. In the unfortunate event that a homeowner does not agree to work cooperatively with SD1 to come to an agreeable resolution, SD1 does have the ability to exercise its powers of eminent domain to move the process forward. As previously stated, SD1 prefers to avoid the use of eminent domain if at all possible and will endeavor to work closely with all individual property owners to address their concerns and/or issues in the hopes of coming to a mutually agreeable resolution.

TOPIC: Communication

Comment:

- SD1 received requests for a time extension on the public comment period. Why wasn't the comment period extended?

Response:

Requests for time extensions were received and reviewed. Because this project is a requirement of SD1's Federal Consent Decree and has a deadline for completion of December 2015, the request for extension was denied in order to keep the project planning schedule on track and to meet this deadline. If deadlines are not met as outlined, regulators can issue significant penalties and fees, ultimately creating additional costs that will be passed on to our ratepayers.

Comment:

- Why isn't SD1 responsive to requests for service?

Response:

SD1 has a trouble call line that is open 24 hours a day, seven days a week for customer calls regarding odor complaints, flooding, sewer backups and other wastewater and storm water inquiries and emergencies. Representatives document all questions and requests for service. . The requests are then prioritized and responded to accordingly. If a customer has an issue they would like to raise, they can call SD1's main line at 859-578-7450.

Comment:

- Why hasn't SD1 provided updated drawings to residents as they have become available?

Response:

SD1 has provided drawings to property owners as requested and when any significant design changes were proposed. The project drawings are continually being updated in preparation for construction, but recent updates have not changed the route of the force main installation or the methods of creek crossings. SD1 has documented in our Meeting Minutes that various drawings were shared with community members throughout the design process.

Comment:

- Why hasn't SD1's Board approved any expenditures for the project or been kept informed about the project?

Response:

SD1's Board of Directors approves an annual budget for capital improvement projects. SD1's Board approved funding for this project in the spring of 2009 and has been provided with regular updates on the project by SD1 staff since then. Most recently, an update in the form of a presentation was given at the September 2013 Board Meeting.

Comment:

- Why weren't the properties that are close to the route but not on the route notified of the project?

Response:

Property owners that border the route of the force main were notified of the October 15, 2013 public meeting. Letters were sent to nearly 200 property owners that were close to

the pipeline or pump station. In addition, a public notice about the meeting was published on October 1, 2013 in the Enquirer and posted on SD1's website. SD1 has gone above and beyond the public notification required by KDOW as part of the loan application process.

Comments:

- *Has the loan from KDOW been approved for the project?*
- *Was KDOW aware of the community concerns about the project?*
- *Has KDOW personnel (Shafiq) been to Camp Springs?*
- *Will KDOW visit the site and meet with residents?*

Response:

The loan for the project is currently progressing through the approval process. The loan approval process is complete when KDOW issues a final SPEAR for the project. KDOW has been made aware of the project through resident notifications and by SD1 through GRW, the engineer for this project.

KDOW personnel have been to Camp Springs and the surrounding area. KDOW met with residents during the public meeting on October 15, 2013 and has met with some residents at the KDOW office in Frankfort.

TOPIC: Environmental Impact

Comment:

- *How has SD1 accounted for the loss of trees and this effect on the area?*

Response:

As part of the environmental studies for this project, Arborist Care Urban Forestry conducted a Tree Impact Assessment. This study has been included in the Environmental Information Document associated with this project. The force main route avoids most of the community's large trees, but where large trees are impacted, SD1 intends to replant where necessary outside the permanent easement.

Comment:

- *Will the creek erode after construction?*

Response:

There should not be any erosion of the creek bank as a result of this project due to SD1's intended use of directional drilling and/or jack and bore construction methodology in which the construction contractor will be drilling and installing the pipe beneath the

creek bed. SD1 has received authority to construct this project from the Army Corp of Engineers (ACOE), as authorized under the provisions of Nationwide Permit No. 12 – Utility Line Activities, and Nationwide Permit No. 33 – Temporary Construction, Access, and Dewatering. SD1 has also received KDOW KAR 401 Water Quality Certification that water quality standards will not be violated by the project.

Comment:

- Will the former landfill at the pump station site effect the construction of the Pump Station?

Response:

The new pump station will be constructed to take into account any subsurface conditions that are determined to exist. A subsurface (i.e. geotechnical) investigation will be conducted to identify the existing ground conditions and recommendations will be made to address those conditions. The geotechnical recommendations will be incorporated into the structural design of the pump station.

Comment:

- Has a study been conducted to evaluate the effect of the pipeline on any endangered species, both plant and animal?

Response:

An Endangered Species investigation was completed for this project and was included as part of the Environmental Information Document. SD1 is in receipt of a letter from the U.S. Fish & Wildlife Service indicating the requirements of the Endangered Species Act of 1973 have been fulfilled.

TOPIC: Odor

Comments:

- Will there be an odor at the air release valves?*
- Can SD1 control the location of the air released by piping the vents to a more desirable location?*
- Do the vent pipes stick out of the ground?*

Response:

While there is a slight potential for odor at the air release valves, SD1 is taking measures to minimize any odors that may be released. SD1 will be installing odor-adsorbing carbon filters at each air release valve location as well as the use of odor inhibiting chemicals at the Ash Street Pump Station as an additional preventative

measure. The air release valves will be located near high points in the force main profile. Piping the air release locations away from the proposed high spots is possible, but the piping must maintain an uphill slope along the pipeline. The air release valves will be located in underground manholes or chambers and will not have any vent pipes protruding out of the ground. Any air that may be exhausted through the air release valves will remain in the underground structures and absorbed in the carbon filters.

Comment:

- Will there be an odor at the Pump Station?

Response:

The Ash Street Pump Station has been designed with a high capacity odor air scrubber to help combat any odors that may occur in vapor form at the pump station. Chemicals will also be added to the wastewater stream at the Ash Street Pump Station to inhibit the formation of odors in the liquid form at both the Ash Street Pump Station, the Riley Road Pump Station and along the force main route.

Comment:

Why does Riley Road Pump Station have an odor? What can be done about this situation?

Response:

The original Riley Road Pump Station was undersized and was subject to frequent wet weather overflows into the adjacent creek. These overflows did caused odor problems at the site. The new Riley Road Pump Station was designed and constructed with adequate capacity to eliminate the frequent overflows that plagued the original station in a typical year. In addition, odor inhibiting chemicals are added to the flow at the pump station to minimize the potential for any odors to form along the force main route. Since the new Riley Road Pump Station has been put in service the overflows have ceased and the potential for odors has been mitigated. SD1 personnel routinely visit the station for maintenance purposes and are instructed to make note of and report any odors detected at the site. To date we are not aware of an odor problem at this station.

TOPIC: Project Benefits

Comment:

- Who benefits from the installation of this project? Let those whose sewage it is pay for the additional cost of alternative routes.

Response:

SD1 is required by federal law to reduce sewer overflows in our service area. In doing so, SD1 must implement fiscally-responsible solutions that are affordable to our ratepayers. This project benefits the Northern Kentucky region both as a solution to health concerns caused by sewer overflows and as a cost-effective way to comply with federal mandates. The cost of sewer service for residents of Northern Kentucky is shared equally across SD1's three-county service area. The Northern Kentucky economy and the health and safety of Northern Kentucky's residents all depend on a functioning sewer system.

Comments:

- *Why is SD1 focusing on providing a short term solution for a long term problem?*
- *Why doesn't SD1 address inflow and infiltration (I/I) problems with the current system, which is the real issue?*

Response:

The Ash Street Pump Station and Force Main do provide a permanent long-term solution to the sewer overflows that occur in the area by providing a route for the sewage to get to the Eastern Regional Water Reclamation Facility. As part of this project, a significant amount of old gravity sewer systems are being upgraded to reduce the amount of inflow and infiltration (I/I) entering the sewer system along Route 8. I/I refers to storm water and groundwater that improperly enters the sanitary sewer system. Further, work will occur in the Silver Grove area, as well as in other areas of SD1's service area, to reduce I/I. Any reduction of I/I will result in a positive impact on the efficiency of SD1's sewer system, but a reduction in I/I in the area of the Ash Street Pump Station will not be substantial enough to negate the need for the pump station and pipeline.

TOPIC: Maintenance**Comment:**

- *How often will maintenance activities occur for both preventive maintenance and repairs to the pipeline, and how will these activities affect the Four Mile Corridor?*

Response:

Maintenance activities along the Four Mile Corridor will primarily entail periodic site visits to each of the air release valves. These site visits will be conducted by SD1 personnel and will normally be done with small pickup trucks. In the unlikely event a pipe break was to occur, SD1 crews would repair the break as quickly as possible and

the pump station would be shut down until the repairs are completed. However, it is important to note that this force main has an estimated lifespan of 100 years.

Comment:

- Will the property owner be responsible for any maintenance issues or have any liability due to an event caused by the pipeline operation or maintenance?

Response:

Property owners that have granted easements to SD1 for sewer line construction will have no responsibility for any maintenance of the pipeline nor will they assume any liability or regulatory responsibility due to a breach in the force main unless the breach was caused by a negligent action on behalf of the property owner. SD1 will perform any and all maintenance required on the pipeline and will perform any restoration required to ensure that property disturbed is returned to its original condition as reasonably practical.